

REMARKS

Favorable reconsideration of the application is respectfully requested in light of the amendments and remarks herein.

Claims 1-53 and 59-77 were pending in this application. By the present Amendment, Claims 1-53 and 59-77 are canceled and Claims 78-126 are added.

Claims 1-5, 8-10, 12, 14-37, 49-53, 59, 60, 62, 63, 65-67, 69, 70, 72, 73, 75 and 76 were rejected under 35 U.S.C. 102(b) as being anticipated by the Wactlar patent. Claims 6, 7 and 11 were rejected under §103 over Wactlar in view of the “Jain” patent; and Claims 13 and 43 were rejected in further view of the Martin patent. Applicants submit that all claims in this application, at least in the form presented herein, are patentable over the cited references for at least the following reasons:

Beginning with new independent Claim 78, it is submitted that this claim is distinguished from what is disclosed in Wactlar. Claim 78 recites that the control processor is arranged to receive data representing a request for selected audio/video material via a first network interface connectable to a first communications network. The reproducing processor is arranged to reproduce the audio/video material items which are communicated via a second network interface connectable to a second communications network. It is submitted that Wactlar does not disclose or suggest an arrangement in which the audio/video reproducing apparatus is connectable to different networks via separate communications interfaces with the effect that the data requesting the audio/video material items in the form of identifying metadata is received via a first of the communications networks whereas the audio/video material items are reproduced in accordance with the identifying metadata and communicated via a second of the communications networks through a second network interface.

As can be observed from figures 4 and 5 of Wactlar, a request for audio/video material items and the material items themselves are communicated via the same communications network. Furthermore, as indicated in column 17 between lines 1 and 27, Wactlar contemplates the use of, amongst other things, a wide area network or a central office local area network. However, there is no disclosure of an arrangement in which a separate network is provided for communicating metadata identifying selected audio/video material items and communicating the selected audio/video material items separately via a second communications network.

Accordingly, Claim 78 is neither anticipated nor rendered obvious by Wactlar, because, providing a separate communications network for communicating the audio/video material items from the metadata identifying the audio/video material items facilitates optimisation of network resources and characteristics to the particular type of data being communicated. For example, the second network interface which communicates the audio/video material via the second communications network may be configured in accordance with the serial digital interface (SDI) or the serial digital transport interface (SDTI) which has been optimised for streaming audio/video material items via a high band-width communications network. In contrast, the data may be communicated via the internet or RS323 or 422 communications link. It is submitted that Wactlar neither alone nor in combination with any of the other cited references teaches an arrangement in which the video material and the metadata are communicated via separate communications networks. Accordingly, Claim 78 is patentably distinguishable from the Wactlar and other cited references.

Independent method Claim 88 is patentable for analogous reasons; and dependent claims 79-87 are patentable based at least upon their dependencies from Claim 78.

Newly presented Claims 89-97 are directed to a video processing apparatus for ingesting video signals. Note that the Office Action asserted on page 3 of the Office Action that Wactlar teaches that an image and audio signal processing apparatus which includes an activity detector, an image sample generator, a compressor and a reproducer.

Applicant respectfully submits that Claim 89 is patentable over Wactlar. In column 13 from line 25 to column 14 line 25 the Wactlar citation discloses an arrangement in which a “paragraphing” function divides the audio/video material into paragraphs which comprises (column 11 line 54 to 65) identifying beginning and end points of each shot, scene conversation or the like and that based on the paragraphs, icons are generated by a function 35. However, there is no disclosure in Wactlar of an arrangement in which more sample images are generated during periods of greater activity indicated by an activity signal which is generated from the content of the video signals. Wactlar merely discloses an arrangement in which icons, (representative images) are generated at the start and the end points of each paragraph which define a quantized discreet amount of audio/video material. In contrast, the invention as claimed in claim 89 is directed to generating an activity signal based on the content of the video signals, for example, by generating a histogram of the colour content and generating more sample images where a relative amount of activity (a relative change in the colour histogram) increases with respect to other parts of the video signal. As a result, an advantage is provided in editing and indicating a content of a video material item in that a greater number of sample images are generated in parts of the video image where activity is greater. As a result, an editor of the material is provided with an approved overview of the contents of the video material which can facilitate navigation and extraction of the contents of the video material. Therefore the invention according to claim 89 is not obvious over Wactlar, since the teaching of generating more sample

images in accordance with greater activity is neither disclosed nor suggested in Wactlar or in combination with any other cited prior art.

Claims 90-97 are patentable based at least upon their dependencies from Claim 89.

New Claims 98 to 110 are directed to an audio/video processing apparatus or method for processing video signals which include associated audio signals representative of sound including speech. (See, e.g., page 29, lines 11-20 for an example of some of the features in these claims.)

Claim 99 of the claims as newly submitted is based on claim 27 of the application as originally filed, although Claim 99 is modified to recite more clearly that the speech content data representing text data is generated at the start of the sentence indicated by the activity signal.

Claim 100 has been newly introduced and is directed to a further limitation in which the activity signal is indicative of a first time a person included in the content of the video signal speaks, the speech data representing text generated for the first speech of that person. Support for this further subject matter is provided, e.g., in lines 14 to 16 of page 29 of the application as originally filed.

Claims 101-108 are based on claims 28 to 35 of the application as originally filed. Furthermore, Claims 109 and 110 which are directed respectively to methods of processing video signals are based substantially on Claims 36 and 37 of the application as originally filed.

Independent Claim 98 is directed to an audio/video processing apparatus which is arranged to generate text information (speech content data) in response to an activity signal. The activity signal is generated in accordance with speech present in the audio signals and in

response to the activity signal a content information generator generates speech data representing the content of the speech. A video processing apparatus generates sample images contemporaneously with the generation of the speech content data (text information).

Accordingly, the invention according to Claim 98 is provided with an advantage in that both the textual content of the speech and a sample image is provided in accordance with speech activity within the audio/video material.

In the Office Action the Examiner asserts that Wactlar teaches an arrangement in which an image and audio signal processor is indexed based on speech data where speech is identified and marked with time codes. There is no arrangement or teaching in Wactlar or other cited prior art which provides an advantage to editing and navigating the content of video material based on speech present in audio signals and for which text information is generated indicating the content of the speech in combination with sample images. It is therefore submitted that the invention according to claim 98 is not rendered obvious by the cited references.

Independent Claims 109 and 110 are patentable for analogous reasons to those just discussed for Claim 98.

Claims 99-108 are patentable based at least upon their dependencies from Claim 98.

In the Office Action the Examiner rejected claims 38 to 44 and 44 to 48 based on what is disclosed in Jain et al (US 6,463,444). In particular, the Examiner asserts that figure 1 in combination with figures 8 and 9 discloses all the features of claim 38. The Applicant respectfully submits that newly presented claim 111 (which has some of the features in claim 38) is patentable over Wactlar in view of Jain for at least the following reasons:

Claim 111 is based on claim 38 of the application as originally filed. However, claim 111 has been written to more clearly define the claimed subject matter. In particular, the feature of the ingestion processor has been clarified to the effect that the items of audio/video material are reproduced selectively in response to metadata identifying the selected audio/video material items. Furthermore, the feature of the database has been clarified to the effect of identifying that the database stores content metadata describing the content of the audio/video material items on the recording medium in association with metadata identifying the location of the audio/video material items on the recording medium. Accordingly, the editing processor which is arranged to display a representation of the content metadata provides the user with a facility for selectively combining audio/video material items in accordance with selected content metadata by communicating metadata which identifies the respective audio/video material corresponding to the content metadata to the ingestion processor which responds by regenerating the selected audio/video material items in accordance with the identifying metadata.

It is submitted that claim 111 is nonobvious over that which is disclosed in Jain or Wactlar. Referring to figure 1 of Jain with reference to the description in columns 3 and 4, Jain discloses an arrangement in which an analogue source is fed to a video cataloguer from which metadata is generated and stored in a metadata server. Contemporaneously, the video signal is encoded and stored on a contents server 140. Clients 150 have access to the metadata server and the content server 140. A reference between the metadata server 130 is provided as an asset reference (identifying metadata) 132.

Referring to the editing system as claimed in claim 111, the ingestion processor corresponds to the contents server 140. This is because as recited, the ingestion processor is arranged in use to reproduce the audio/video material items from a recording medium with

reference to identifying metadata which identifies the selected audio/video material items. Accordingly, the identifying metadata will correspond to the asset reference from connection 132 fed via the metadata server 130. The metadata server 130 will correspond to the database of claim 111 which stores content metadata describing the contents of the audio/video material items in association with identifying metadata. Whilst the clients 150 could be construed as being the editing processor, there is no disclosure in Jain of an editing processor which is coupled to the ingestion processor and the database and has a graphical user interface for displaying a representation of the content metadata in the database and for selecting audio/video material items from the displayed representation of the content metadata. Furthermore there is no disclosure in which the selected audio/video material items are reproduced by the ingestion processor in response to identifying metadata corresponding to the selected audio/video material items communicated to the ingestion processor by the editing processor.

Stated more explicitly, claim 111 is distinguished from what is disclosed in Jain by the database storing content metadata in association with identifying metadata and the content server storing both the audio/video contents and the associated identifying metadata. That is to say, whereas in Jain the identifying metadata is communicated from the database to the ingestion processor, the invention according to claim 111 is arranged to the effect that the editing processor communicates the metadata to the contents server from which the video material is selectively reproduced. This is because there is no disclosure in Jain et al that the contents server stores identifying metadata to the effect that the editing processor (clients 150) can communicate the identifying metadata to the ingestion processor (content server 140) without going through the database (metadata server 130).

In contrast, having identified an appropriate combination of audio/video materials by the content metadata and arranging the content metadata in a desired order, the identifying metadata corresponding to the content metadata can be communicated to the ingestion processor in order to retrieve the selected audio/video items. This inventive aspect is not disclosed in Jain et al or in Wactlar et al. Accordingly, the invention according to claim 111 is patentable over any proper combination of these references.

Independent Claims 119 and 121 are patentable over Wactlar and Jain for at least the same reasons just discussed concerning analogous features of Claim 111.

The remaining claims in this application are patentable based at least upon their respective dependencies from one of the above-discussed independent claims.

Conclusion

In light of the foregoing, entry of this Amendment, and the allowance of this application with Claims 78-126, are respectfully solicited.

The above statements concerning the disclosures in the cited references represent the present opinion of Applicant's representative and, in the event that the Examiner disagrees, Applicant's representative respectfully requests the Examiner specifically indicate those portions of the references providing the basis for a contrary view.

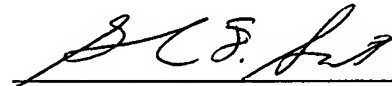
It is submitted that the claims in this application, as originally presented, are patentably distinct over the prior art cited by the examiner, and that these claims were in full compliance with the requirements of 35 U.S.C. 112. Replacement of these claims, as presented herein, are not made for the purpose of patentability within the meaning of 35 U.S.C. §§101, 102, 103 or

112. Rather, these changes are made for clarification and to round out the scope of protection for the invention.

In the event that additional cooperation in this case may be helpful to complete its prosecution, the Examiner is cordially invited to contact Applicant's representative at the telephone number written below.

Respectfully submitted,
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